

## MECHANICAL ENGINEERING TECHNICIAN I OPEN, NON-PROMOTIONAL FINAL FILING DATE: DECEMBER 16, 2004

OFFERING EQUAL EMPLOYMENT OPPORTUNITIES TO ALL REGARDLESS OF RACE, COLOR, CREED, NATIONAL ORIGIN, ANCESTRY, SEX, MARITAL STATUS, DISABILITY, RELIGIOUS OR POLITICAL AFFILIATION, AGE OR SEXUAL ORIENTATION.

**OPEN NON-PROMOTIONAL**  Applications will be accepted on an open, non-promotional basis only.

**HOW TO APPLY** 

Applications (STD 678) must be RECEIVED OR POSTMARKED no later than the final filing date. FAXED OR E-MAILED APPLICATIONS WILL NOT BE ACCEPTED. Applications postmarked AFTER THE FINAL FILING DATE and personally delivered or received via interoffice mail AFTER 5:00 P.M. ON THE FINAL FILING DATE WILL NOT BE ACCEPTED FOR ANY REASON. THE EXAMINATION TITLE MUST BE INDICATED ON THE APPLICATION.

**Department of Transportation** FILE BY MAIL:

FILE IN PERSON: **Department of Transportation** Exam Services (MS 86) 1727 30th Street, 1st Floor Sacramento, CA 95816 P.O. Box 168036 (916) 227-5325

Sacramento, CA 95816-8036

SUBMIT APPLICATIONS ONLY TO THE ADDRESSES INDICATED ABOVE. DO NOT SEND APPLICATIONS TO THE STATE PERSONNEL BOARD OR DEPARTMENT OF TRANSPORTATION DISTRICT OFFICES. Applications may be obtained at the State Personnel Board in Sacramento, any Employment Development Department office, Department of Transportation district office, or at www.dot.ca.gov/hq/jobs on the Internet.

REASONARI E **ACCOMMODATION**  If you have a disability and wish to participate in one of our testing services, programs, or activities and require a specific accommodation, please mark the appropriate box for Question #2 on the Examination and/or Employment Application form. You will be contacted to make specific arrangements. TDD users may contact the California Relay Service TDD line at 1-800-735-2929, Voice line at 1-800-735-2922, or the Exams TDD line at (916) 227-7857/Calnet 498-7857.

**SALARY RANGE QUALIFICATIONS APPRAISAL INTERVIEW REQUIRED** 

\$3048 - \$3703

It is anticipated that qualifications appraisal interviews will be held during January/February 2005.

**IDENTIFICATION** REQUIREMENTS FOR **ADMITTANCE TO** THE EXAMINATION

Accepted applicants are required to bring either a photo identification card or two forms of signed identification to each phase of the examination.

NOTE: All applicants must meet the education and/or experience requirements for this examination by the final filing date. Your signature on your application indicates that you read, understand, and possess the minimum qualifications required.

NOTE: All applications/resumes must include: "to" and "from" dates (month/day/year), time base, civil service or private sector titles, and the duties performed. Applications/resumes received without this information will be rejected.

Qualifying experience may be combined on a proportionate basis if the requirements stated below include more than one pattern and are distinguished as "Either" I, "or" II "or" III, etc. For example, candidates possessing qualifying experience amounting to 50% of the required time of Pattern I, and additional experience amounting to 50% of the required time of Pattern II, may be admitted to an examination as meeting 100% of the overall experience requirements.

**MINIMUM** QUALIFICATIONS Education: Completion of a two-year terminal curriculum in mechanical technology at a community college, or completion of the sophomore year (at least 60 semester units or equivalent quarter units) of a professional mechanical engineering college or university curriculum. [Candidates may substitute mechanical drafting experience for the education on the basis that one year of experience is equivalent to one year (at least 30 semester units or equivalent quarter units) of education.] and

Experience: Two years of experience as a Drafting Services Aid, Range B, in the California state service. Or II

Experience: Three years of drafting experience in an engineering office (one year of which may be specification writing only), two years of which must have been mechanical drafting and design experience equivalent in level of responsibility to a Drafting Services Aid, Range B, in the California state service.

**POSITION DESCRIPTION** 

This is the entry and first working level of the series. Under the supervision of an engineer, incumbents prepare complete design and contract drawings and check shop drawings and construction submittals; design simple mechanical systems to previously established standards; prepare basic plans, specifications and quantity and cost estimates on a wide variety of mechanical work such as air conditioning, ventilation and heating systems for buildings and tunnels, bridge mechanical devices, piping and duct work, highway maintenance equipment and equipment components and mechanical systems for power plants, pumping plants and generator, fan and pump installations; prepare mechanical system layouts and mechanical detail drawings of average difficulty; use state-of-the-art technology, i.e., Computer-Aided Drafting/Design (CADD), personal computers, stand-alone interactive systems and automated lettering devices; incorporate mechanical details into general plans and occasionally will work on drawings and designs other than mechanical; inspect simple manufacturing and installations of mechanical materials and highway maintenance equipment and equipment components; make simple engineering calculations; report the status of basic mechanical engineering work and completed results.

### SEE REVERSE SIDE FOR ADDITIONAL INFORMATION

It is an objective of the State of California to achieve a drug-free state work place. Any applicant for State employment will be expected to behave in accordance with this objective because the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service, and the special trust placed in public servants.

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This examination will consist of a qualifications appraisal interview weighted 100%. In order to obtain a position on the eligible list, a minimum score of 70 must be attained.

#### **OUALIFICATIONS APPRAISAL INTERVIEW - WEIGHTED 100%**

#### Scope:

#### A. Knowledge of:

- 1. Design of mechanical systems, components and materials.
- 2. Installation and construction methods.
- 3. Drafting symbols, devices and mechanisms.
- State-of-the-art technology, i.e., CADD, personal computers, stand-alone interactive systems and various technical aids.
- Air conditioning, ventilation and heating systems, piping and duct work and fan, turbine, pump, highway maintenance equipment and equipment components and installations.
- 6. Mechanical theory, and practice.
- 7. Engineering mathematics.
- 8. The department's safety and health policies and procedures.
- Basic safety practices contained in the California Code of Regulations, Title 8 Industrial Relations, Safety Orders, and the General Industry Safety Orders regarding personal protective equipment.

### B. Ability to:

- Follow directions.
- 2. Prepare design and contract drawings for mechanical work from existing drawings and from design notes and sketches.
- Interpret all drawings, plans and specifications of any kind encountered in the work and incorporate mechanical and associated drawings, plans and specifications into general design and contract documents.
- Prepare as-built plans.
- 5. Use state-of-the-art technology, i.e., CADD, personal computers, stand-alone interactive systems and automated lettering devices.
- Prepare neat and accurate drafting and freehand and machine lettering.
- 7. Report the status of work and the completed results.
- 8. Prepare basic, or assist in preparation of complex plans, specifications and quantity and cost estimates of mechanical work.
- Do mechanical design and layout work of average difficulty and detail drafting of the most complex nature.

**NOTE:** If conditions warrant, this examination may utilize an evaluation of each candidate's experience and education compared to a standard developed from the class specification. For this reason, it is especially important that each candidate take special care in accurately and completely filling out his or her application. List all experience relevant to the "Requirements for Admittance to the Examination" shown on this announcement, even if that experience goes beyond the seven-year limit printed on the application. Supplementary information will be accepted, but read the "Requirements for Admittance to the Examination" carefully to see what kind of information will be useful to the staff doing the evaluation.

# ELIGIBLE LIST INFORMATION

An open, non-promotional eligible list will be established for the Department of Transportation. The list will be abolished 12 months after it is established unless the needs of the service and conditions of the list warrant a change in this period.

### **CAREER CREDITS**

Career credits will be added to the final score of all competitors who are successful in this examination and who qualify for these credits. IF YOU RECEIVE VETERANS PREFERENCE POINTS, YOU CANNOT ALSO RECEIVE CAREER CREDITS.

# VETERANS PREFERENCE POINTS

Veterans preference points will be added to the final score of all competitors who are successful in this examination and who qualify for, and have applied for, these points. Due to changes in the law, which were effective January 1, 1996, VETERANS WHO HAVE ACHIEVED PERMANENT CIVIL SERVICE STATUS ARE NOT ELIGIBLE TO RECEIVE VETERANS PREFERENCE POINTS.

#### **GENERAL INFORMATION**

For an examination without a written feature, it is the candidate's responsibility to contact the Caltrans Office of Examination Services in Sacramento at (916) 227-5325, three weeks after the final filing date if he/she has not received a progress notice.

If a candidate's notice of oral interview or performance test fails to reach him/her prior to the day of the interview due to a verified postal error, he/she will be rescheduled upon written request

Applications are available at the State Personnel Board in Sacramento, any Employment Development Department office, Department of Transportation district office or at www.dot.ca.gov/hq/jobs on the Internet.

If you meet the requirements, you may take this examination. Possession of the entrance requirement does not assure a place on the eligible list. All candidates who pass will be ranked according to their scores.

The Department of Transportation reserves the right to revise the examination plan to better meet the needs of the service if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all candidates will be notified.

Examination Locations: When a written test is part of the examination, it will be given in such places in California as the number of candidates and conditions warrant. Locations of interviews may be limited or extended as conditions warrant.

Eligible Lists: Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) subdivisional promotional, 2) departmental promotional, 3) multidepartmental promotional, 4) servicewide promotional, 5) departmental open, 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on this bulletin.

General Qualifications: Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history, and fingerprinting may be required.

Career Credits: In open, non-promotional examinations, career credits are granted to: 1) state employees with permanent civil service status; 2) full-time employees of the State who are exempt from State civil service pursuant to the provisions of Section 4 of Article VII of the California Constitution, and who meet all qualification requirements specified by the Board and have 12 consecutive months of service in an exempt position, and 3) individuals who have served one full year in, or are graduates of the California Conservation Corps (eligibility shall expire 24 months after graduation from the California Conservation Corps). Three points are added to the final test score of those candidates who meet the above criteria, and who are successful in the examination. Such examinations cannot be for managerial positions described in Government Code Section 3513. Competitors not currently employed in State civil service who have mandatory reinstatement rights may also be eligible for career credits, but they must explain their civil service status in the appropriate section of the application form 100-678. (Section 4 of Article VII of the California Constitution is posted at the State Personnel Board, 801 Capitol Mall, Sacramento, CA.)

Veterans Preference: California law allows granting of Veterans Preference points in open entrance examinations and open, non-promotional exams. Credit in open entrance examinations is granted as follows: 10 points for veterans, widows and widowers of veterans, and spouses of 100%-disabled veterans; and 15 points for disabled veterans. Credit in open, non-promotional examinations is granted as follows: 5 points for veterans; and 10 points for disabled veterans. Directions for applying for veterans preference points are on the veterans preference application (Form 1093) which is available from the State Personnel Board, written test proctors, and the Department of Veterans Affairs, P.O. Box 942895, Sacramento, CA 94295-0001.

For individuals with disabilities, this document may be available upon request in alternate formats. To obtain an alternate format, please call or write to the California Department of Transportation, Office of Examinations and Special Programs, P.O. Box 168036, MS 86, Sacramento, CA 95816. Voice (916) 227-7858 / Calnet 498-7858 or TTY (916) 227-7857 / Calnet 498-7857. California Relay Service: Voice 1-800-735-2922 or TTY 1-800-734-2929.